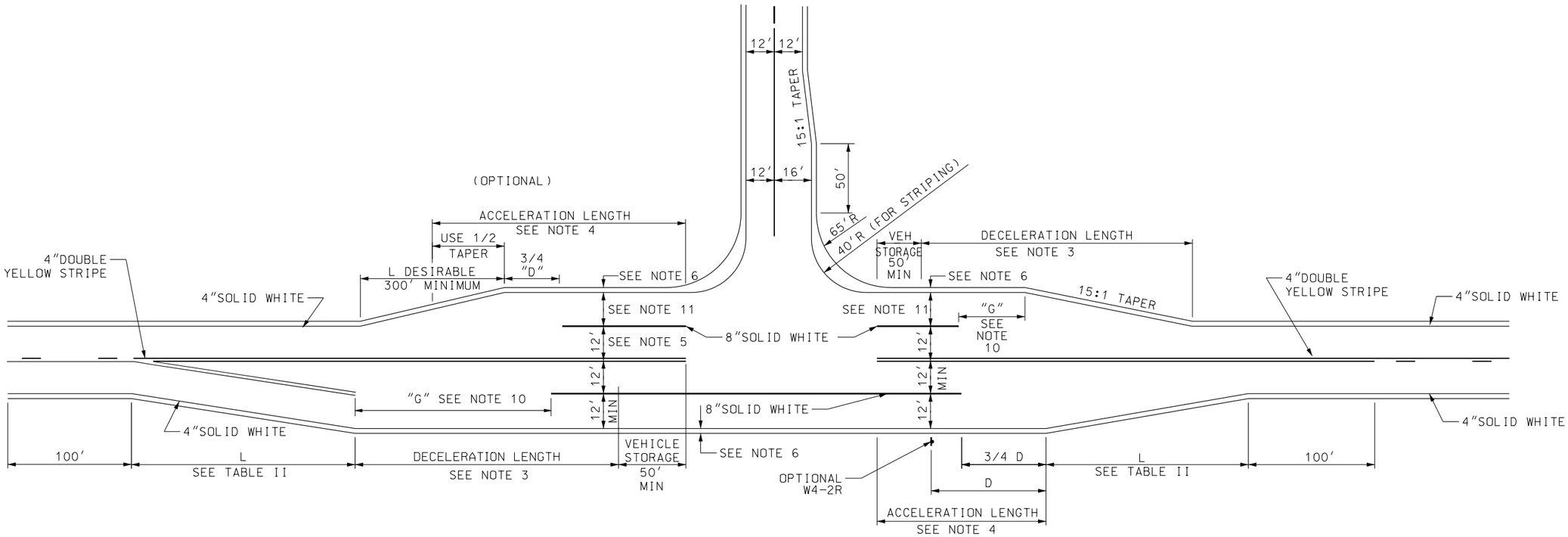

NOTES:

1. USE CURRENT EDITION OF THE AASHTO A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS FOR DESIGN OF ROADWAY ELEMENTS.
2. USE CURRENT EDITION OF THE AASHTO ROADSIDE DESIGN GUIDE FOR CLEAR ZONE REQUIREMENTS.
3. FOR DECELERATION LENGTH:

   USE A RUNNING SPEED OF 10 MPH BELOW POSTED SPEED LIMIT FOR ENTRANCE SPEED.

   ADJUST FOR SPEED CHANGES ON GRADES AS NECESSARY.
4. FOR ACCELERATION LENGTH:

   USE A RUNNING SPEED OF 10 MPH BELOW POSTED SPEED LIMIT FOR MERGING SPEED.

   ADJUST FOR SPEED CHANGES ON GRADES AS NECESSARY.
5. USE A 16 FEET MINIMUM ACCEPTANCE LANE FOR 50 FEET WITH A 15:1 TAPER IF ACCELERATION LANE IS NOT USED.
6. USE 4 FEET MINIMUM SHOULDER FOR RIGHT TURN DECELERATION LANE TAPER, RIGHT TURN STORAGE LANE, RIGHT TURN ACCELERATION LANE, AND RIGHT TURN ACCELERATION LANE TAPER. MATCH EXISTING WIDTH OF SHOULDER, WITH A 4 FEET MINIMUM, AT ALL OTHER SHOULDER LOCATIONS.
7. STANDARDS SHOWN ARE RECOMMENDED VALUES. EXCEED STANDARDS IF CONDITIONS PERMIT.
8. PROVIDE LEFT TURN POCKET ON OPPOSITE APPROACH FOR A FOUR LEG INTERSECTION.
9. PROVIDE LEFT TURN LANE, RIGHT TURN DECELERATION LANE, RIGHT TURN ACCELERATION LANE, AND/OR LEFT TURN ACCELERATION LANE WHEN VOLUMES EXCEED THOSE LISTED IN TABLE I. INCREASE THE VOLUMES TO PROVIDE PASSENGER CAR EQUIVALENTS FOR TRUCKS.
10. G = 90′ FOR SPEEDS 40 MPH AND BELOW
    G = 140′ FOR SPEEDS 45 TO 50 MPH
    G = 180′ FOR SPEEDS 55 MPH AND ABOVE
11. 12′ LANE WIDTH DESIRABLE
    10′ MINIMUM LOW VOLUME LOW SPEED.
12. SEE STD DWG ST 5 FOR INFORMATION ON SIGNING AND STRIPING DETAILS.

TABLE I

MINIMUM LEVELS FOR INSTALLATION OF TURN AND ACCELERATION LANES ON RURAL TWO LANE ROADS

SPEED	LEFT TURN LANE	RIGHT TURN LANE	RIGHT TURN ACCELERATION LANE	LEFT TURN ACCELERATION LANE
40 MPH AND LESS	25 VPH	50 VPH	OPTIONAL	OPTIONAL
45 TO 55 MPH	10 VPH	25 VPH	50 VPH	**
60 MPH AND GREATER	REQ'D*	10 VPH	25 VPH	***

* FARM ACCESSES EXCLUDED.
** OPTIONAL FOR 50 MPH AND LESS. FOR 55 MPH, AS REQUIRED BY THE REGION TRAFFIC ENGINEER.
*** AS REQUIRED BY THE REGION TRAFFIC ENGINEER.
VPH= VEHICLES PER HOUR IN ANY ONE HOUR PERIOD IN PASSENGER CAR EQUIVALENTS.

TABLE II

SPEED	FORMULA
FOR SPEEDS OF 40 MPH AND LESS	$L = \frac{WS^2}{60}$
FOR SPEEDS OF 45 MPH AND GREATER	L= WS

WHERE:
L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

"D" DISTANCE

SPEED MPH	"D" FEET	3/4 "D" FEET
25	250	190
30	325	245
35	400	300
40	475	360
45	550	415
50	625	470
55	700	525
60	775	585
65	850	640

REVISIONS

NO.	DATE	APPR.	REMARKS

UTAH DEPARTMENT OF TRANSPORTATION
STANDARD DRAWINGS FOR ROAD AND BRIDGE CONSTRUCTION
SALT LAKE CITY, UTAH

RECOMMENDED FOR APPROVAL — JAN.01.2005 DATE — DEPUTY DIRECTOR
CHAIRMAN STANDARDS COMMITTEE — JAN.01.2005 DATE — APPROVED

TYPICAL RURAL 2 LANE ROAD WITH MEDIAN LANE AND DECELERATION LANE FOR INTERSECTING CROSSROADS

STANDARD DRAWING TITLE

STD DWG
DD 14